

Environmental Review Form for Argonne National Laboratory

Click on the blue question marks (?) for instructions, contacts, and additional information on specific line items.

(?)**Project/Activity Title:** Midwest Photovoltaics Analysis Facility at the Tollway

(?)**ASO NEPA Tracking No.** _____ (?)**Type of Funding:** WFO
B&R Code _____

(?)**Identifying number:** ERF-01083 WFO proposal # P-11031 CRADA proposal # _____
Work Project # _____ ANL accounting # (item 3a in Field Work Proposal) _____
Other (explain) _____

(?)**Project Manager:** Seth Darling Signature: _____ Date: 1/13/11

(?)**NEPA Owner:** Phil Rash Signature: _____ Date: 1/12/11

(?)**NEPA Owner:** N. VanWermeskerken Signature: _____ Date: 1-13-11

ANL NEPA Reviewer: M. A. Kamiya Signature: _____ Date: 1/13/2011

I. (?)**Description of Proposed Action:**

We propose to establish a photovoltaics analysis facility involving the installation, operation, and monitoring of various photovoltaic (PV) technologies at a site located at the Illinois Tollway headquarters. Data would be sent in real time to an existing central database located on the Argonne site. Solar PV panels of various technologies would be installed and studied and a weather instrumentation package would be installed on the mounting structure that would measure variables such as solar insolation, temperature, and precipitation. A second weather package would be installed near the Photovoltaics Analysis facility on an existing structure to measure conditions at standard heights and conditions. Monitoring devices would record information including voltage and current along with solar production and weather conditions.

The Tollway would perform any necessary environmental studies and obtain any required permits; the Tollway would also coordinate communications with the utility providers regarding interconnection. Argonne would (1) Identify candidate PV technologies; (2) Inspect the installation location for technical suitability; (3) Identify specific equipment vendors and purchase equipment for delivery to the Tollway; and (4) Prepare drawings of the system. Using the drawings and delivered equipment, the Tollway would install the mounting infrastructure, the solar panels and ancillary hardware (inverters, weather stations, etc.), and connect the system electrically and to communications equipment. Argonne would verify the installation has been carried out according to the specifications. The Tollway would maintain the system once installed such as through periodic cleaning.

II. (?)**Description of Affected Environment:**

The project would be located at the Illinois Tollway Headquarters in Lisle, IL near Ogden Ave., I-88 & I-355. The specific location at the headquarters will be selected based on a technical review of the area. See attached photo.

III. (?)Potential Environmental Effects: (Attach explanation for each “yes” response. See Instructions for Completing Environmental Review Form)

A. Complete Section A for all projects.

1. (?)Project evaluated for Pollution Prevention and Waste Minimization opportunities and details provided under items 2, 4, 6, 7, 8, 16, and 20 below, as applicable. Yes X No
 The site would be selected based on minimum operations criteria and would also consider the sites that best suit the net minimum use of materials and control the project costs.
2. (?)Air Pollutant Emissions Yes X No
 Minor emissions from cars, light duty vehicles, gas powered pumps and generators may occur during construction, maintenance and operations. The Tollway would be responsible for these activities.
3. (?)Noise Yes X No
 Minor construction noises consistent with construction and maintenance would occur. The Tollway would be responsible for these activities.
4. (?)Chemical/Oil Storage/Use Yes X No
 Standard maintenance and construction materials would be used such as fuel, oil grease, cleaning products, concrete, etc. The Tollway would be responsible for these activities.
5. (?)Pesticide Use Yes No X
6. (?) Polychlorinated Biphenyls (PCBs) Yes No X
7. (?) Biohazards Yes No X
8. (?)Liquid Effluent (wastewater) Yes No X
 No effluent is expected, if excavations fill with water due to rain etc. The foundations would be pumped out and the water filtered per the Erosion Control Plan.
9. (?)Waste Management Yes X No
 - a) Construction or Demolition Waste Yes X No
 Minor amounts of construction debris would be generated. Recycling of these materials would occur where appropriate and reasonable. The Tollway would be responsible for the management of the waste.
 - b) Hazardous Waste Yes No X
 - c) Radioactive Mixed Waste Yes No X
 - d) Radioactive Waste Yes No X
 - e) PCB or Asbestos Waste Yes No X
 - f) Biological Waste Yes No X
 - g) No Path to Disposal Waste Yes No X
 - h) Nano-material Waste Yes No X

10. (?)Radiation Yes ___ No X
11. (?)Threatened Violation of ES&H Regulations or Permit Requirements Yes ___ No X
12. (?)New or Modified Federal or State Permits Yes ___ No X
13. (?)Siting, Construction, or Major Modification of Facility to Recover, Treat, Store, or Dispose of Waste Yes ___ No X
14. (?)Public Controversy Yes ___ No X
15. (?)Historic Structures and Objects Yes ___ No X
16. (?)Disturbance of Pre-existing Contamination Yes ___ No X
17. (?)Energy Efficiency, Resource Conserving, and Sustainable Design Features Yes X No ___
 This project will install photovoltaic panels to determine energy efficiency as a sustainable initiative for the Tollway.

B. For projects that will occur outdoors, complete Section B as well as Section A. The Tollway would be responsible for activities that occur for construction and installation of equipment including any environmental state requirements.

18. (?)Threatened or Endangered Species, Critical Habitats, and/or other Protected Species Yes ___ No X
19. (?)Wetlands Yes ___ No X
20. (?)Floodplain Yes ___ No X
21. (?)Landscaping Yes X No ___
 After construction the Tollway would be responsible to restore the landscape and then maintain it as a routine operation.
22. (?)Navigable Air Space Yes ___ No X
23. (?)Clearing or Excavation Yes X No ___
 The Tollway would be responsible for clearing and excavation. Erosion control measures for the excavation would be the responsibility of the Tollway.
24. (?)Archaeological Resources Yes ___ No X
25. (?)Underground Injection Yes ___ No X
26. (?)Underground Storage Tanks Yes ___ No X
27. (?)Public Utilities or Services Yes ___ No X
28. (?)Depletion of a Non-Renewable Resource Yes ___ No X

C. For projects occurring outside of ANL complete Section C as well as Sections A and B. The Tollway would be responsible for activities that occur for construction and installation of equipment including any environmental state requirements.

29. (?) Prime, Unique, or Locally Important Farmland Yes ___ No X
30. (?) Special Sources of Groundwater (such as sole source aquifer) Yes ___ No X
31. (?) Coastal Zones Yes ___ No X
32. (?) Areas with Special National Designations (such as National Forests, Parks, or Trails) Yes ___ No X
33. (?) Action of a State Agency in a State with NEPA-type Law Yes ___ No X
34. (?) Class I Air Quality Control Region Yes ___ No X

IV. **Subpart D Determination:** (to be completed by DOE/ASO)

Are there any extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal? Yes ___ No X

Is the project connected to other actions with potentially significant impacts or related to other proposed action with cumulatively significant impacts? Yes ___ No X

If yes, is a categorical exclusion determination precluded by 40 CFR 1506.1 or 10 CFR 1021.211? Yes ___ No ___

Can the project or activity be categorically excluded from preparation of an Environment Assessment or Environmental Impact Statement under Subpart D of the DOE NEPA Regulations? Yes X No ___

If yes, indicate the class or classes of action from Appendix A or B of Subpart D under which the project may be excluded. B3.6 Siting/construction/operation/decommissioning of facilities for bench scale research, conventional laboratory operations, small-scale research and development, and pilot projects.

If no, indicate the NEPA recommendation and class(es) of action from Appendix C or D to Subpart D to Part 1021 of 10 CFR.

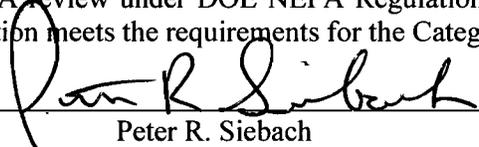
ASO NEPA Coordinator Review: Kaushik N. Joshi

Signature: *KN Joshi*

Date: 01-24-2011

ASO NCO Approval of CX Determination:

The preceding pages are a record of documentation that an action may be categorically excluded from further NEPA review under DOE NEPA Regulation 10 CFR Part 1021.400. I have determined that the proposed action meets the requirements for the Categorical Exclusion identified above.

Signature: 
Peter R. Siebach
Acting Argonne Site Office NCO

Date: 1/24/2011

ASO NCO EA or EIS Recommendation: **NA**

Class of Action: _____

Signature: _____
Peter R. Siebach
Acting Argonne Site Office NCO

Date: _____

Concurrence with EA or EIS Recommendation: **NA**

CH GLD: _____

Signature: _____

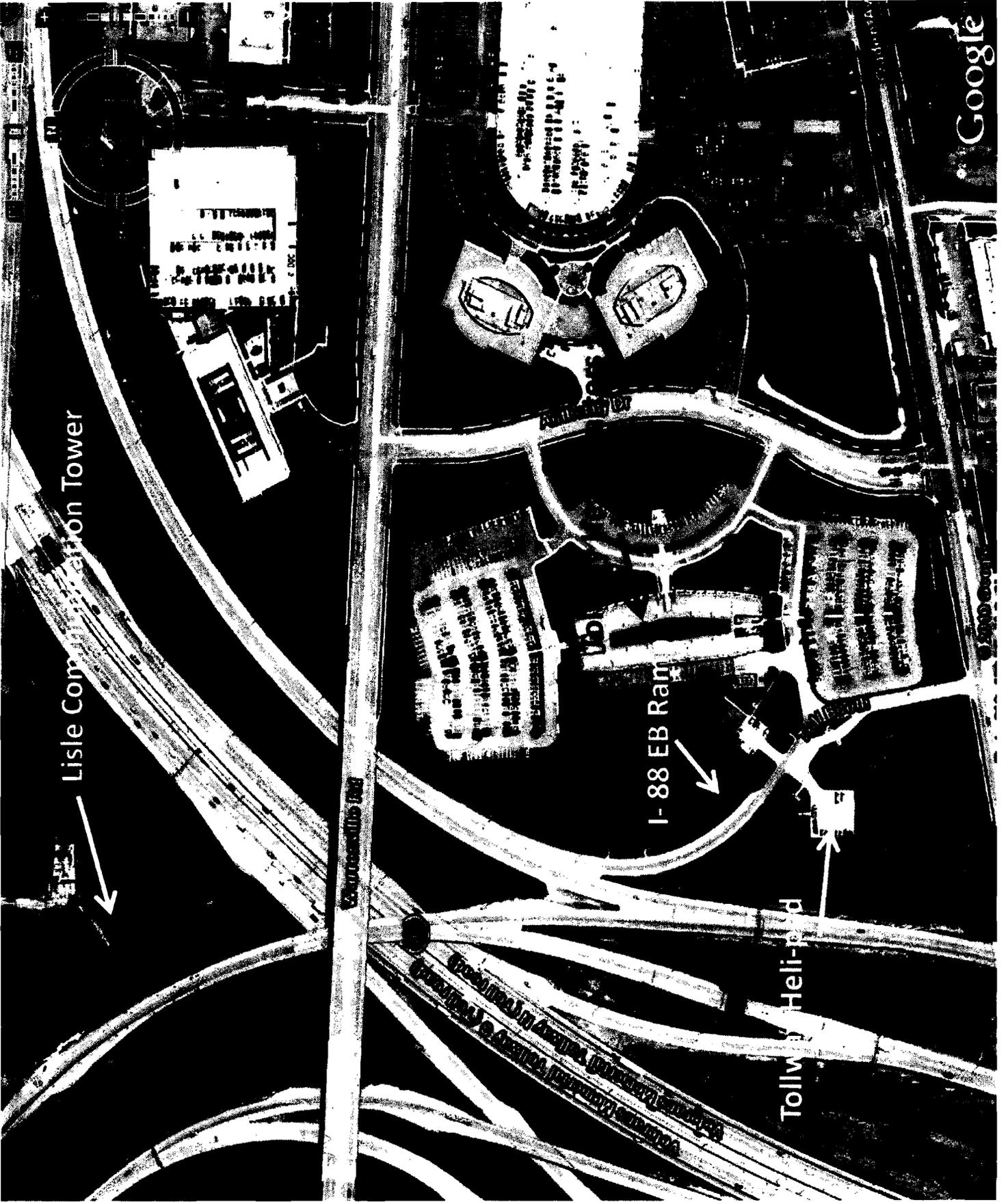
Date: _____

ASO Manager Approval of EA or EIS Recommendation: **NA**

An ___ EA ___ EIS shall be prepared for the proposed _____ and
_____ shall serve as the document manager.

Signature: _____
Dr. Joanna M .Livengood
Manager

Date: _____



Lisle Communication Tower



I-88 EB Ramp



Tollway Heli-pad



Google